

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:
a semiconductor element having a thickness of 200 μm
or less;
an electrode pad formed on said semiconductor element;
a post electrically connected to said electrode pad;
and
a sealing resin for sealing a surface of said
semiconductor element whereon circuitry is formed and said
post.
2. A semiconductor device according to Claim 1,
wherein a thickness of said sealing resin is greater than a
half of a thickness of said semiconductor element.
3. A semiconductor device according to Claim 1,
wherein said semiconductor element has a central portion
that has a first thickness and a peripheral portion that
has a second thickness that is smaller than the first
thickness.
4. A semiconductor device according to Claim 3,
wherein a thickness of said sealing resin is greater than a
half of the thickness of the central portion of said
semiconductor element.

5. A manufacturing method for a semiconductor device comprising:

- a step for forming an electrode pad on a main surface of a semiconductor wafer;

- a step for forming a post to be connected to said electrode pad;

- a step for resin-sealing the main surface of said semiconductor wafer and said post;

- a step for forming a groove from a surface of said resin to a predetermined depth of said semiconductor wafer; and

- a step for polishing a rear surface of said semiconductor wafer to a bottom of said groove and dividing said semiconductor wafer into individual semiconductor devices.

6. A manufacturing method for a semiconductor device comprising:

- a step for forming an electrode pad on a main surface of a semiconductor wafer;

- a step for forming a post to be connected to said electrode pad;

- a step for forming a first groove having a first width on the main surface of said semiconductor wafer;

- a step for resin-sealing the main surface of said semiconductor wafer and said post;

- a step for forming a second groove having a width that

is smaller than said first width from a resin surface on said first groove until a predetermined depth of said semiconductor wafer is reached on the main surface of said semiconductor wafer; and

a step for polishing a rear surface of said semiconductor wafer to a bottom of said second groove and dividing said semiconductor wafer into individual semiconductor devices.

7. A mounting method for a semiconductor device comprising:

a step for preparing a semiconductor device in which a main surface of a semiconductor element having a thickness of 200 μm or less has been resin-sealed;

a step for disposing said semiconductor device on a mounting substrate; and

a step for connecting said semiconductor device and said mounting substrate by heat treatment.

8. A manufacturing method for a semiconductor device, comprising:

a step for forming an electrode pad on a main surface of a semiconductor wafer;

a step for forming a post to be connected to said electrode pad;

a step for resin-sealing the main surface of said semiconductor wafer and said post;

a step for forming a groove from a surface of said resin to a predetermined depth of said semiconductor wafer;

a step for polishing a rear surface of said semiconductor wafer until said semiconductor wafer reaches a predetermined thickness; and

a step for breaking a portion where the groove has been formed in said semiconductor wafer to divide said semiconductor wafer into individual semiconductor devices.

9. A manufacturing method for a semiconductor device, comprising:

a step for forming an electrode pad on a main surface of a semiconductor wafer;

a step for forming a post to be connected to said electrode pad;

a step for forming a first groove having a first width on the main surface of said semiconductor wafer;

a step for resin-sealing the main surface of said semiconductor wafer and said post;

a step for forming a second groove having a width that is smaller than said first width from a resin surface on said first groove until a predetermined depth of said semiconductor wafer is reached on the main surface of said semiconductor wafer;

a step for polishing a rear surface of said semiconductor wafer until said semiconductor wafer reaches a predetermined thickness; and

a step for breaking a portion where said second groove has been formed in said semiconductor wafer to divide said semiconductor wafer into individual semiconductor devices.